

THE  
BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. XXXIII. WEDNESDAY, AUGUST 13, 1845. No. 2.

FISKE FUND PRIZE DISSERTATIONS OF THE RHODE ISLAND MEDICAL SOCIETY.

NO. 1.—BY WM. EDWARD COALE, M.D., BOSTON.

(Communicated for the Boston Medical and Surgical Journal.)

*The best Mode of Treating, and the best Apparatus for the Management of, Fractures of the Thigh.*

For this, pro Dissertatore, pro Honorario Saluto.

INTRODUCTION.

When we consider how few are the principles concerned, it seems strange that there should be any unneeded point connected with fractures of the femur—strange indeed that everything pertaining to the subject is not reduced to fixed rules, predicated upon accurately weighed and unpeachable facts. All the parts affecting or affected are upon a scale large enough to enable us to ascertain and comprehend every anatomical peculiarity that might be of value, and simple enough to permit us to understand, sufficiently for all practical purposes, their use and mode of action. The mechanism of the parts can scarce be called complex—their construction not highly delicate—in short, estimated by ordinary rules, the anatomist, physiologist or pathologist does not meet with any salient obstacle to the perfect elucidation of his portion of the subject. Yet each weekly Journal, almost without exception, furnishes us with some new (!) method of treating fractures of the femur, involving (if we believe the writer) principles hitherto unknown, and possessing advantages over every other previously in use.

We do not promise that we have any new and brilliant light to throw upon the subject—that we have any striking theory to unfold, or any yet undiscovered and astounding fact to announce. Enough if we can sift the volumes upon the subject which have annually swelled the literature of our profession, and present, in a digested and accessible form, all that is valuable of the mass before us. Having done this with Sirrison, we trust we may then be permitted to add what little we have gained from our own observations and experience.

ANATOMY OF THE THIGH.

As we write for those whom it is better to guard chiefly than to alarm, we shall be, and undoubtedly will be, pardoned for the omission of the words "anatomy of the thigh."

ployed to move it, we do not deem it necessary to describe the first or even to rehearse the names of the second, but will confine ourselves to noticing those peculiarities of the anatomy of these parts which more immediately influence us in treating fractures of the bone.

To begin with the bone—the first point that arrests us is the great diversity of the axes of the shaft and neck. They join each other at very nearly a right angle; any force, therefore, which is exerted in the direction of the axis of the one portion—the direction in which that portion is best able to resist—operates transversely upon the other, manifestly in a direction most unfavorable to its powers of resistance. But for this arrangement, which, however, is productive of great and manifest advantage to the mobility of the limb, the structure and general configuration of the bone would imply a far greater strength than even that which it now so evidently possesses.

The curvature of the shaft forwards must be looked upon also as a peculiarity affecting the liability of the bone to fracture, more especially when taken in connection with the arrangement of the muscles upon the posterior part of the thigh.

The comparatively unyielding nature of the coxo-femoral articulation deserves note. Its inaptness to give or yield upon receiving a shock is evidently due to two causes—the very slight mobility of the pelvis itself,\* and the deep and accurately-adapted cavity into which the head of the femur is fitted. The difference of the effect of the same impulse upon the shoulder and hip joint is readily conceivable. In the former, the cavity receiving the extremity of the long bone is shallow—admitting a great extent of motion. The scapula itself is very moveable, yielding readily in a certain degree, to any force exerted upon the humerus, not only lessening the abruptness of the shock, but changing the direction in which it acts to one in which the consequent injury may be slighter—in other words, often substituting a dislocation for a fracture. But with the hip joint, unless the impulse is received whilst the femur is near the limits of its range of motion—whilst it is in a state of extreme flexion or extension, abduction or adduction—or unless it comes in the direction of the axis of the acetabulum and from within outwards (an unusual one), the result, if the force is great enough, is a fracture, varying in its situation with the particular direction of the impulse.

The ligaments of the coxo-femoral articulation arrest our attention, from the part they play in intra-capsular fractures of the neck of the thigh-bone. Of these, the most important to us is the capsular ligament—not differing in its general arrangement, to any noticeable degree, from the capsular ligaments of other articulations, but remarkable for its great strength, and still more from its peculiarity of commencing very high and over a very large surface of the ileum, and extending for a considerable distance along

\* Many authors speak of the pelvis being very moveable, and thus saving the femur very often from fracture. So it is when subject to the volition, but it must be remembered that this is not its condition, at the moment when fracture occurs. Then the numerous and powerful muscles surrounding the pelvis on all sides and firmly bracing it in every direction, render it almost as unyielding as if it and all the contiguous parts were one mass of equally dense and inelastic tissue.

The last circumstance which interests us in considering fractures of the femur, is the size, number and diverse direction of traction of the muscles which surround it. The two first peculiarities would of themselves cause us little difficulty, but taken in connection with the last, they constitute the greatest obstacle to the reduction of the fragments and their retention in the requisite apposition. The individual action of these muscles is not necessary to notice. For the present we will but mention the great obliquity with which adductors join the bone—the relation of the muscles on the posterior aspect of the thigh with the femur, like the chords to the arc of the circle—and the direction of the muscles generally which are employed in rotating the limb—as among the causes of most of our difficulties in treating this class of injuries.

Fractures of the femur not only admit of a ready classification founded upon the nature and seat of the injury, but seem to require it in attempting to enter upon any dissertation concerning them or account of the very different effects produced, and the diversity of the remedial means to be used in treating them. As a sort of tabular view we give the following, though in confining ourselves strictly to the discussion of the treatment of fractures we shall not have occasion to refer to all the varieties here mentioned, but merely furnish the table for the convenience of reference when necessary.

**A.—Fractures of the superior extremity of the Femur.**

- ### 5 Fractures of the trochanters.

**1 Transverse.**

- 2 Oblique.

just above the condyles.

- 2 " through " "

**a Fractures from gun-shot.**

- b " " other violence.

## HISTORY.

There is no investigation in which we cannot to a degree profit by an acquaintance with the achievements of those who have previously given their attention to the same subject. It will therefore be not devoid of advantage, and certainly not of interest, to make a few researches into the history of the branch of surgery which has engaged us, and trace the various steps of our predecessors, from the early rude contrivances used for fracture of the femur, to the more perfect apparatus of the present day.

In the vast field surveyed by Hippocrates, fractures were not neglected, and one of the works attributed to this philosopher (*Περὶ Ἀγνῶν*)\* is devoted to this subject, giving us apparently not the views peculiar to the author, but most probably a digest or summary of what was known upon it at that time.† In this we find that same curious mixture of gross superstition and close observation which prevailed throughout not only medical, but all science. Much faith is placed in symptoms wholly insignificant, much importance is given to things wholly irrelevant—as, for instance, the number of bandages used; whilst some of his advice has much soundness in it.

Of the bandages, those which went next the skin were styled *Hypodesmides*; those outside of the dressings, *Epidesmides*. In fractures of the femur three *hypodesmides* were used. One was carried from the point of fracture up, and another from the same point, down the limb. The object of these was to press the blood and humors out of the injured part to the extremities, and if the bands were properly applied, the next day a soft edematous condition of the end of the limb supervened; but if the edema were hard, it was considered a sign that the constriction was too great, in which case the bandage was to be removed, the part anointed with oil and warm water, and the bandage replaced, but more loosely than before. After applying these bandages the fracture was surrounded by a waxed cloth and covered with another roller, which also completely enveloped the coxo-femoral articulation, in order to protect the soft parts against the edges of the splints. From an idea that it was the most natural position, the knee joint was kept extended, and to effect this fully, when the splint (which consisted of a long box much like the present fracture box, reaching from the ilium beyond the heel) was put on, the knee was carefully fastened down in it by a band.

To produce extension and counter-extension in fractures and dislocations, the ancients made use of a machine called the *Glossocomium*. This instrument, rude and clumsy, but powerful, is figured by Paré.‡ It consists of two longitudinal pieces of plank, between which the limb is placed. A strap surrounds the latter above and below the fracture. From the one above, counter-extending cords pass over pulleys in the upper end of the longitudinal pieces down to a windlass at the lower end. From the strap below the fracture similar cords pass directly down to the same windlass, by turning which, very powerful but illy-tempered and

\* The only English translation, I believe, is that of Clifton, 1734.

† Gerdy. *Traité des Bandages*. Paris, 1837. 2nd ed. p. 441.

‡ Liv. XV. Des Fractures, c. 30th des fract. de la cuisse fract. en la main de l'oe. P. 401, inf. ed.



badly-directed traction is exerted on each piece—upwards upon the upper, and downwards upon the lower.

In compound fractures Hippocrates directs that the bones, if projecting, should be replaced by powerful means, using iron levers to force them into their proper position; or, if these means should fail, they may be sawed off. The same apparatus and bandages may be used as above, so arranging them that the wound may be accessible, and adapting compresses to take the pressure from the lacerated parts.

Galen makes no modification of the mechanism of Hippocrates, but describes the form and material of the bandages more particularly—the latter being furnished, according to the peculiar occasion, by leather, woollen or linen fabric—the first to be used to constrict cartilages and other hard parts—the next, where the parts are delicate, either naturally or from injury—and the last, where moderately firm pressure is required.

Celsus was not content with less than six bandages before the application of the splints. The bone having been reduced, these bandages were passed in very various directions, and the number of turns which each should take is told with minuteness. The splints are then to be applied. Further details of his method of treatment, as they exhibit no new principle or indeed any marked improvement over those previously devised, we do not think it necessary to give.\*

The imperfect records of our profession exhibit no advance in the treatment of fractures of the femur until we come to what may be called the middle ages of medicine—the days of Berengarius, Massa, Sylvius and Guy de Chauliac. The latter suggested many of the appliances at present in use in the form of junk bags, compresses, &c., and replaced the clumsy methods of extension by a weight attached to the foot by a cord passing over a pulley at the foot of the bed.

Our next step brings us to Ambrose Paré, whose laborious industry has garnered up for us nearly all that was of value in those who went before him, but made more perspicuous by his own clear mind. His writings show him to have still been hampered by the superstitions which hung so heavy over science in the preceding ages, but they lift about him rather as broken fetters than as chains that still bind, and the quaint and modest simplicity of his language afford to the true lover of his profession a pleasant retreat from the tiresome pages of those who too often, at the present day, strive to compensate by verbosity and declamation for the paucity and meagreness of their ideas.

Paré still adhered to the bandages of Hippocrates. After applying these, three splints were to be adapted—made of pasteboard or similar material. One was placed beneath the limb and one each side. Junk bags filled with straw, after De Chauliac's suggestion—and other compresses when necessary—were used, and the whole apparatus then enveloped in cloths similar to the splint cloths now in use. The limb was then to be properly placed, supporting it upon something soft and even

\* De Medicinis, L. viii., chap. 2, § 1, p. 442. Edin. ed. of 1802.

(mol et égal) and raising it sufficiently to prevent "fluxion" to the part, but not enough to constrain or make uncomfortable the patient.\*

Fabricius ab Aquapendente, of Padua, advocated the use of the dressings of Hippocrates, and approves his views. He used splints surrounded with tow.†

Scultetus, also, still adhered to the three bandages of Hippocrates, but recommended cutting pieces out of them when necessary to have access to a wound. He also gives us that bandage which bears his name, and which has held its place among our dressings even to the present day.‡

We next come down to the last century, when, amidst the general activity of the medical profession, fractures of the femur received a full share of attention, and the improvements suggested, both in the apparatus used and in the general treatment, multiply to a great extent.

Heister recommended making counter-extension by means of a napkin passed between the thighs, and made fast above the hips to the edge of the bed—and extension by attaching the foot, by another napkin, to the foot of the bed. He still adhered to the number and arrangement of the bandages of Hippocrates, and in general adopted his principles.§

One suggestion of Heister is worthy of notice. It occurred to us without knowing that Heister had previously mentioned it. He advises that the extension should not be made solely and continually through the foot and ankle, but, to relieve these, another extending bandage should be attached above the knee, and traction made alternately for six or eight hours at a time upon one and the other. The difficulty would be in so adjusting the bands that when the point of traction is shifted, the direction should be unaltered, a difficulty which, it appears to us, has been magnified.

A machine for the treatment of fractures of the femur, invented by M. Belloq, scarce deserves notice, except to mention that he made use of the tuber of the ischium for the point of counter-extension. Otherwise, it consisted of a heavy, clumsy frame-work, to the upper part of which the thigh was attached by enclosing it in two pieces of sheet iron—while upon the lower part a slide, enclosing the leg, traversed by means of a rack and pinion.||

In turning to England at this period of our history, we are first arrested by Gooch, who, though not free from many of the absurd ideas then prevalent, showed some originality, and certainly an admirable frankness and modesty. To him we owe the suggestion of the familiar and much-used splint, made by glueing leather upon a thin board, and then cutting the latter through longitudinally at short intervals, so that whilst the splint adapts itself readily to the rounded periphery of the limb, it is still stiff and unyielding in the direction of its length.¶

\* Op. citat. Book iv. chap. xx. In Chap. xxiii. of the same book he gives an interesting account of the treatment he himself received at the hands of Richard Hubert, "Chirurgien en Roi," for a fractured leg.

† *Fentisarchus Chirurgiens. Dissertat. iv. De fract. Franc. 1608, and Oper. Chirurg. Osm. Padus, 1667, fol.* though I cannot now recall my authority for this reference.

‡ *Armamentum Chirurgicum*, which was published in English about 1674, under the name of "The Chirurgion's Storehouse."

§ Gerdy, op. cit. p. 445.

¶ *Memoires de l'Acad. Roy. de Chirurg. New Ed., 1819. V. iii. p. 256.*

¶ *Cases and Practical Remarks on Surgery. Norwich, 1767, Vol. ii. p. 300.*

Gooch's apparatus for fracture of the femur consisted of an iron hoop, so contrived as to be accommodated to a limb of any size. This encircled the thigh at its junction with the trunk, and furnished the point for counter-extension. From it a longitudinal piece passed down upon each side of the thigh, having a screw attached to the extremity. Another hoop, provided with offsets through which the above-mentioned screw passed, encircled the thigh just above the knee. By turning the screw, which was done by means of a key applied to the extremity, the two hoops were separated and extension effected. Besides the application of this contrivance, the thigh was surrounded by the above-mentioned splint and properly guarded by compresses. The obvious objection to this apparatus is the constriction of the limb by the hoops, and the small surface over which the force of the extension and counter-extension is distributed. He assures us, however, that he had used it with great success, and this, in spite of its defects, we can suppose possible in a careful and observant surgeon.\*

With a generosity well worthy of praise, after describing his own apparatus, Gooch goes on to speak of one constructed by a Mr. Layman, of North Walsham, "upon the best principles" he had yet seen. As far as can be judged from the imperfect description given, this seems to have consisted of a fracture box with a moveable bottom, to which the leg and lower part of the thigh was attached, whilst the upper part was made fast to the box itself "by a belt passing on the inside of the thigh." Extension was effected by a screw operating upon the moveable bottom.†

With Gooch's intelligence it is strange that we should find him still adhering to the absurd notions about "the juice of the callus," and urging great care against permitting it to flow in too great quantity, "which must be prevented by proper compression or deformity will ensue."

[To be continued.]

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#### TRANSACTIONS OF THE CONNECTICUT MEDICAL SOCIETY.

[Communicated for the Boston Medical and Surgical Journal.]

It is the great object in the several States where medical societies exist, to diffuse information and advance the general interest of the profession and the science of medicine. For several years past it has been the general sentiment in this State that something should be done to excite more interest than for forty members to meet annually, and appoint standing committees, and several plans have been recommended, but generally have failed in Convention to be adopted. Last year, however, it was provided that the annual dissertation should be published, with the proceedings of the Convention; a good move, but not carried out—for after waiting two or three months instead of weeks, the proceedings appear in a pamphlet of twenty-four pages, eighteen of which are taken up with a list of members, standing bye-laws, title-page, &c., leaving six for the

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\* Op. Cit. Vol. ii. p. 307.

† Op. Cit. p. 315, in a note at foot of page.

whole yearly transactions of the *Connecticut Medical Society*, together with the report of the Medical Institution of Yale College, &c. The *ostensible* reason for the non-publication of the annual dissertation was the ill health of the author, but the members expected it, and it is hoped it will yet be published. Again, last year a prize essay was given out—the subject, scarlatina; the prize to be paid from the funds of the Society. Under these circumstances, the members expected to be benefited by the essay, and it was generally supposed it would be the property of the Society and published with its transactions. Five essays were handed in, which were said by the committee to be very able; but how are the profession to be benefited by them? And there is no provision for continuing the plan, no essay being given out for another year! We presume the author of the prize essay would have been *willing* it should be published with the proceedings. Again, for the last four or five years, at the annual examination of the medical students of Yale College, a member of the committee of examination has been selected to deliver an address to the graduating class. This has been a business of the committee or faculty of the college, rather than of the State Society. Still the address has been published in pamphlet, and distributed to the members of the Medical Society throughout the State, till the last, from which we hear nothing in this way. It was given by Charles Woodward, M.D., of Middletown, and was regarded by the press, and medical men who heard it, as a very able production. Is a new precedent to be established? And, further, Dr. Woodward is immediately left off the committee of examination. This is rather unprecedented under such circumstances, though it *might* have been accidental entirely.

Such being the case, the interest in the Society through its transactions will be likely, we fear, to be less in future than it has been heretofore. It is well known that in some sections of the State there is want of interest already, and it is evident it will not be excited if things go on in this manner. It is apprehended that many are dissatisfied with the compulsion necessarily inflicted by the charter, and that a voluntary society would be preferable. Now it is very probable there are circumstances which will induce the State Society to give up the charter and go on the principle of voluntary association. But in order for success, there must be some interest either in the annual convention or the transactions of the Society, or it will be an entire failure. There must be more interest to sustain any institution from choice than by compulsion. Many now refuse to pay taxes, and it is to be feared that more will do so if their money is not better expended. In order for any institution to succeed, it must answer the end for which it was created; and when it fails to do this, a revolution will sooner or later take place. It need not be so with the Connecticut Medical Society. It should continue to be, as it has been, a bond of union among the members and an ornament to the profession; but to do this, we must keep up with the times. We might indeed, as in other States, have several valuable papers published, making something more than a lean pamphlet like our present annual, and it is hoped and presumed the next dissertation and other matters may be laid

before the profession. If not, many interesting papers from the county societies, which are unknown out of the several counties, might be embodied, and add to the general interest of the Society.

These remarks, based upon facts as they exist, do, I am sure, express the sentiments of the great body of the Medical Society throughout the State, and we hope will tend only to that which will advance the science of medicine, promote fellowship and good feeling in the profession, and general confidence in the community.

A MEMBER.

#### DIAGNOSIS.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—Two circumstances of late occurrence have led me to reflect whether physicians were particular enough in their diagnosis of disease, and were satisfied themselves that they understood clearly the proper thing to be done. I prescribed, of late, for a young man on account of a difficulty in one of his ears. The symptoms were a noise in the diseased organ, the head full and confused and covered with a scaly eruption. He attended to his business as usual, and considered himself otherwise well. After making some few inquiries, I directed him to syringe his ear with a weak solution of Castile soap, there being a small quantity of ear-wax collected in it; to apply a small blister under the ear, and take a full dose of salts and senna. Under this treatment he grew no better, and as I was not in practice, I told him to call on Dr ———, of this city, which he did. As soon as he ascertained the symptoms, he clearly perceived the proper course to be adopted. He syringed the ear out with water quite warm, in a forcible manner, completely flooding for some time the external ear. This removed the difficulty, and the patient was cured.

A boy about 12 years old applied to this same oculist for blindness of one eye. He received a blow by one of his fellows on the organ, in the first place, after which he gradually lost his vision. The eye looked like the other, with the exception that the pupil was larger. The doctor told the friends of the boy that it was incurable. The family was intelligent, and the oculist distinguished, which seemed to settle the fate of the young man's eye. Had the family been of a different class, they would have applied directly to a quack. Soon after this, I became acquainted in the family, and the eye was shown me as a matter of courtesy, and the circumstances related as above. It was a case of amaurosis, and I became interested in it; and consulted all my authors, having then just commenced practice. The family asked me if I thought it possible anything could be done to benefit him. I told them I thought there was a chance of making him better, saying, at the same time, there was much doubt. I viewed the disease as functional—the retina having become paralytic. His friends concluded to have me prescribe for him, and he continued under treatment for nearly three months. When it was commenced vision was exceedingly imperfect, and at the close of it he could read common print with ease.

I have one other case to notice which came under the treatment of this same oculist. The subject of it was a young man in college, 23 years of age. There was very slight inflammation of the eyes, with much weakness. He was directed to leave college, and stimulating washes of a different character were directed from time to time, but all without improvement. He came into the neighborhood where I resided, and assisted some in teaching. He became acquainted with me, and talked frequently about his eyes. I considered a restoration, if it was brought about at all, must be effected by a long course of quietude and moral habits, supposing the best medical treatment had been adopted. He grew no better, however, and desired me to do something for him. This led me to examine his case very attentively in all its bearings. I bled him from the arm, purged him with salts and senna more or less frequently, and kept up a drain from the back of the neck by seton for eight or ten months, by which he was cured and has continued so ever since, now six years.

I did not design to write a labored article on this subject, but merely to relate a few facts in order to call attention to it. I know there is some guess-work in prescribing medicine for the sick—a guess-work, to be sure, founded on intelligence. One man may guess better than another. His natural capacity, medical education, ability to collect, analyze, and deduce, in view of the symptoms present, all assist in this respect. Some, however, have as little ground for guessing at certain things, as the college student had when he guessed how a sheep came in the college belfry. Having seen some tracks near the lightning rod, he thought the animal might have climbed up that way. I think a large portion of practitioners are lax in collecting symptoms and prescribing medicine, from the fact that one half of those for whom they are called upon to prescribe, need nothing; hence a tendency to too great indifference in all cases. Much good may be done by a judicious, skilful practitioner; but above all things, let every one be decided in his own mind that he is doing the right thing for his patient, or else do nothing, or that which is equivalent to nothing. This is the safest kind of quackery that can be adopted, and is the whole secret of homœopathic practice.

August 8, 1845.

J. C.

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#### ABLUTION FOR THE PREVENTION OF ERYSIPELAS.

[Communicated for the Boston Medical and Surgical Journal.]

In the spring of 1845 the Massachusetts General Hospital was very much infected with erysipelas. One patient had died of this disease after an illness of three days, and many others were severely affected with different and curious forms of this disorder.

As this institution is kept in a state of perfect cleanliness, it seemed that the general atmosphere of the place ought not to produce this disorder, and that it could only arise from the retention of foul matters in the beds, and about the persons of those affected with unhealthy wounds.



On this ground the following course of prevention was based by Dr. Warren.

All the patients confined to their beds were directed to be washed over the whole body daily with soap and water, and their bed-clothes to be ventilated daily if possible. Those who could leave the room, but remained in a delicate state of health, were ordered to the warm bath once in two or three days; and those who were in a state to bear it, were directed to the daily use of the shower bath.

Under this practice, in the course of fourteen days the disease entirely disappeared, and did not again show itself while this system was rigidly pursued.

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#### VOLVULUS AND STRANGULATION OF THE INTESTINES.

By James M. Gordon, M.D., of Lawrenceville, Ga.

It is to be regretted that comparatively so few cases of mortality have a place assigned them in our medical journals, notwithstanding many of them might be productive of unusual interest. A large majority of physicians who write, very naturally, entertain a predilection to report those cases only which have terminated in *remarkable cures*, or at least successful issues; to the utter exclusion of those of an opposite character, however advantageous to the medical profession. The following case, although it may avail but little practically, may not prove wholly unacceptable to the pathologist.

D. P. C., of Gwinnett county, æt. 35, a respectable planter, and a man of uncommon strength and vigorous health, was attacked on the 18th of May last with the most excruciating pains in the abdomen, which were attended with obstinate constipation of the bowels. As he was supposed to be laboring under an attack of colic, various domestic remedies were administered without effecting the slightest abatement of pain, or relief to the confined bowels. A Thomsonian physician of the neighborhood was requested to see him, and who had charge of the case for the subsequent week, but without affording any relief. My partner, Dr. Russell, and myself, were then requested to visit him, and found him the subject of most violent paroxysms of pain in the abdomen, with partial remissions of comparative ease. The skin was cool, tongue coated with a dark brown fur, pulse nearly natural, bowels constipated. Upon further examination it was discovered that considerable pain and tenderness were evinced from pressure upon the lower dorsal and lumbar vertebrae. Local revulsives were freely applied to the spinal column; opiates and antispasmodics were then administered, which had the effect to allay all pain. An active cathartic was now retained till about the time catharsis should have been produced, when the pain returned with its full force of intensity. Laxative enemata were given in such quantity as to distend the whole colon, but all to no purpose, the stricture not being removed. The pain soon gave place to a death-like sickness at the stomach, pallid countenance, cold extremities, surface bedewed with a cold clammy

perspiration, followed by vomiting of an abundance of stercoraceous matter very offensive to the smell. The most energetic means were adopted for his relief—yet nevertheless without averting the fatal result of this unfortunate case. For the few last days such remedies were used as were best calculated to allay pain and support the sinking powers of nature. He continued to grow worse, and expired in the most intense agony at 8 o'clock, P. M., of June 1st, thirteen days after the attack.

*Post-mortem* appearances twelve hours after death. On opening the abdomen the ileum exhibited a dark red (almost black)-appearance, which extended through all of its coats, and also to the mesentery. Upon examination it was ascertained that an *introsusception* of about an inch and a half in length existed about four inches above the termination of the ileum. So firmly had the coats of the intestine become agglutinated that they presented the appearance of a fleshy tumor, blocking up its entire calibre. It was also observed that the ileum had made a complete revolution upon itself, with the peritoneum as an axis, so as to strangulate a knuckle of intestine five inches in length. The first point of strangulation was immediately above the *introsusception*, and the second twelve inches above the last. They were twisted around each other so as to form a *knot* which was with difficulty relieved after the morbid specimen had been removed from the body. The incarcerated noose of intestine presented an almost black color, and was greatly distended with gas. About twenty inches of intestine were involved in the congestion. The points where the intestine passed around itself were of a dull white color, presenting a striking contrast with the surrounding parts.

*Remarks.*—The above case presents several interesting peculiarities:—*First*, the complicated nature of the disease; *secondly*, its length of duration; *thirdly*, the attendant symptoms. So far as our information at present extends, we believe there has been no case in which *introsusception* complicated with a *linking* of the intestine so as to produce an additional cause of strangulation has been recorded, although instances of either of the obstructions separately are upon record. The most remarkable circumstance in relation to the case is the great length to which it was protracted, and in our mind it can be accounted for in but one way, and that is by the supposition that the *introsusception* was the *original* obstruction, and the knotting of the intestine a *secondary* lesion, and a consequence of the great increase of peristaltic motion of the intestines produced by the active cathartic medicines administered, or otherwise by the violent commotion of the contents of the abdomen in the efforts at vomiting. A pretty conclusive evidence of the fact, that the *introsusception* must have existed from the attack, is the firmness with which adhesion existed between the intestinal folds—so perfect that the different layers could be but very indirectly traced. It is but reasonable to suppose that the *introsuscepted* portion was not entirely deprived of circulation, or the process of gangrene and sloughing, which was slowly progressing, must have advanced more rapidly. On the contrary, the knot was so firmly made as to exclude all circulation, and the noose of strangulated intestine actually in a state of incipient gangrene, which could

have only existed for the space of a few days, otherwise death must have ensued at a much earlier period. A remarkable fact in regard to the symptoms is, that there was no vomiting (except after a cathartic had been administered) throughout the course of the disease. Had not the secondary lesion supervened, it is not impossible but there would have been sloughing and a discharge per anum of the invaginated portion of intestine, and a spontaneous yet complete cure.—*Southern Med. Jour.*

#### ON THE VALUE OF VACCINATION AND RE-VACCINATION.

IN 1842, the Academy of Sciences offered a prize for the best treatise on the above subject. Thirty-five candidates responded to the call, and the perusal of their labors has proved so laborious an undertaking, that it is only very lately that M. Serres has been able to present a report to the Academy, in the name of the committee appointed to decide on the comparative merit of the essays. M. Serres's report is a remarkable document, and is also important from its conclusions having been adopted by the Academy after mature deliberation. We extract the following data from this report:—

"Vaccination preserves the human species from variola, but its preservative power is not absolute. Variola itself, either spontaneous, or produced by inoculation, does not preserve absolutely from future attacks, therefore it is not extraordinary that vaccination should not. Thus, Mead mentions having seen three variolous eruptions take place successively on the same woman; the son of Forestus was twice attacked with variola, and Dehaen states that one of his patients was attacked six times by variola with impunity, but died of a seventh invasion of the disease. Although, however, vaccination is sometimes powerless to preserve us from variola, it *always* diminishes the gravity of the malady. This property, which Jenner and his first successors did not even suspect, is thoroughly proved by the various facts which have been recently accumulated. In one of the most terrible epidemics of variola that has taken place in Europe since the discovery of vaccination—that of Marseilles, in 1828—more than 10,000 persons were attacked. Of these, 2000 only had been vaccinated, and of that number 45 only died; whereas 1,500 of the 8000 who had not been vaccinated, were carried off by the pestilence.

"Vaccine matter evidently loses part of its efficacy in passing from arm to arm; it is therefore desirable to renew it as often as possible. A remarkable fact mentioned by one of the competitors, supplies us with a means of renewing it, as it were, at will. A cow was vaccinated with matter taken from a child. Not only did the pustules rise, but they were communicated to other cows, so that the cowpox was observed nearly in its natural state. The pustules were identical in both cases.

"The propriety of re-vaccination is now fully established. In Germany, the various governments have been induced to pay great attention to re-vaccination, owing to the circumstance of epidemics of variola hav-

ing latterly manifested themselves with a severity to which we had become quite unaccustomed since the introduction of vaccination. Re-vaccination has, consequently, been resorted to on a very extended scale, and has had the effect of arresting the epidemics. Thus, in Wurtemberg, 42,000 persons who have been re-vaccinated, have only presented eight cases of varioloid; whereas one third of the cases of variola have latterly occurred on persons who had been vaccinated. It is principally between the ages of 14 and 35 that vaccinated persons are disposed to be attacked by variola. When there is an epidemic, the danger commences earlier, and children of 9 years of age may be seized. Prudence, therefore, requires that, under ordinary circumstances, re-vaccination should be performed at the age of 14 or 15, and four years earlier if within the radius of an epidemic of variola."—*London Lancet*.

#### EMETICS IN BRONCHITIS.

By John Higginbottom, F.R.C.S., Nottingham.

I HAVE found an emetic dose of ipecacuanha a very valuable remedy at that stage of bronchitis where a sudden, low, or sinking state has come on with oppression at the chest, and the expectoration difficult, endangering suffocation. Vomiting with ipecacuanha has not only soon relieved these symptoms, but has roused the whole system, and has produced such a decided change, as to render the patient convalescent in a few days. I have never seen the same good effects in such circumstances produced by any other remedy. The two following cases are of that description:

"Mr. D—, aged 60, an inn-keeper, of a gross habit, but not considered intemperate, had been much reduced in consequence of a neglected erysipelatous inflammation of the leg and thigh; this had in some measure subsided, but he had at the same time bronchitis, attended with a troublesome cough, difficult respiration and expectoration. A sudden state of sinking came on, with increased dyspnoea, and a feeble, quick pulse. I gave half a drachm of ipecacuanha in a little water; he vomited at different times for two hours; the lowness and dangerous symptoms were much relieved; he had no relapse of the low or sinking state, and he gradually recovered under a common mild treatment."

"Mrs. C—, aged 78, had an attack of the prevailing influenza; saline aperients, with diaphoretic and expectorant medicines, had been given for about five days, when a low, sinking state came on, with difficulty of breathing. I was inclined to give an emetic of ipecacuanha as the most probable remedy to afford relief. I named it to her daughter, fearing the old lady would object to it. I was glad to find my patient would take it; and I may here mention the favorable idea patients sometimes have of an emetic, imagining that vomiting enables them to throw up the phlegm. I gave her half a drachm dose of ipecacuanha, which had the desired effect of completely relieving her. I was only required to visit my patient for five more days, she being then quite convalescent."

The following observations in Dr. Johnson's Review, of April, 1844,

are corroborated by the above case, and, I have no doubt, will hold good in a variety of diseases, both in the commencement and in the sinking stage of disease:—"The use of emetics (I would say ipecacuanha, from the great safety of its operation) is far too much neglected in the present day, and most practitioners are unnecessarily timid about using them to old patients; a single emetic will often effect more good in the course of a day or two, than other remedies in a week or two."—*Ibid.*

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### THE BOSTON MEDICAL AND SURGICAL JOURNAL.

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BOSTON, AUGUST 6, 1845.

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*Crania Egyptiaca.*—Men of profound attainments in science are alone capable of appreciating the critical researches of the comparatively new school of ethnographical philosophers, which is becoming so prominent in our day. We have been looking, of late, into the history of this interesting effort to decypher the records of our race, and find that more credit is actually due to the author of the *Crania Egyptiaca*, than was expressed in a recent article on the progress of ethnography. Mr. Gliddon, of whom frequent mention has been made, and who is extensively known for the important services he has rendered to the onward cause of antiquarian knowledge in Egypt, aside from the strong light he has thrown upon philology, will lose nothing by bringing the claims of his personal friends more prominently into view.

On looking back, we discover that Dr. Morton first wrote to Mr. Gliddon some eight years ago, that if he would send him about twenty-five ancient Egyptian heads, he would undertake to decide the race of men to which they belonged. This proposition undoubtedly stimulated the Consul to aid in the accomplishment of an important investigation. He sent not only the twenty-five, but one hundred, and with those and the evidences deduced from history and the monuments, Dr. Morton succeeded, after a laborious inquiry of three years, in publishing that splendid work called *Crania Egyptiaca*, in which the question of Nilotic ethnography is definitely settled. Dr. M.'s *Crania Americana* was going through the press before Mr. Gliddon's first visit to the United States, and the author's general views introduced into the latter production, were confirmed by subsequent researches. By inquiry, it appears that Dr. Morton has actually been pursuing these extraordinary examinations fifteen or more years, and published the rich volume that embodies his discoveries and opinions entirely at his own expense, asking no other reward than a fair share of the reputation that is due to such efforts and sacrifices. Mr. Gliddon is a generous man, and a strictly just one in all literary matters. For this we honor him, and posterity will remember his claims. From a page in his *Ancient Egypt* we take the following paragraphs, which contain the frank and spontaneous avowal of an educated gentleman, whose warmth of friendship for Dr. M. makes him as solicitous for his fame as for his own.

"A point has been reached in this exposition; where, before proceeding further, it is imperative on me to acknowledge the source, whence I de-

rive these views of primeval Nilotic history; and it is with cheerful readiness that I indicate my valued friend, Dr. Samuel Geo. Morton, of Philadelphia, as my authority for the positive demonstration of the Caucasian race and Asiatic origin of the ancient Egyptians.

"Under the title of '*Crania Egyptiaca*,' will appear from Dr. Morton's pen, a memoir, wherein the Caucasian race of the early Pharaonic Egyptians is, for the first time, demonstrated, by a mass of craniological, anatomical, historical and monumental evidence. I have had the full advantage of Dr. Morton's revision of whatever on this subject is herein advanced; while, so far as my name may be associated with the '*Crania Egyptiaca*,' it need only be said that I *derive the original idea, all the craniological facts in its support, and by far the greater portion of the argument herein put forward, from the perusal of this work in manuscript*; no less than from these subjects having, for six years, formed the substance of much epistolary intercourse, and for many months the constant theme of conversations between its author and myself.

"Were it not for the conviction, thus acquired from the incontrovertible array of facts set forth in the '*Crania Egyptiaca*' (facts hitherto unpublished by any writer in the world; and, with the exception of Sir J. G. Wilkinson, and one or two others, heretofore contested by all hieroglyphical authorities), I should not have ventured to take up against the opinions of learned and unlearned, the subject of the Caucasian race of the Egyptians; but reposing in confidence upon the labors of one so eminently qualified to decide, I am not apprehensive of the consequences in the minds of those who will peruse the work thus announced. Furthermore, its author is not responsible for any deviations from his views I may, perhaps erroneously, have adopted."—*Ancient Egypt*, p. 45.

Mr. Gliddon's reputation, as an ardent and highly successful cultivator of Egyptian history and archaeology, is too well founded and too cordially acknowledged, to require any other support than his own merits; yet it would be unjust to the scientific reputation of our country, and to Dr. Morton particularly, not to say that his elaborate pursuits in ethnography, antedate, by many years, any acquaintance with Mr. Gliddon. In fact, on further observation, we discover that Dr. M.'s peculiar views of Egyptian ethnography, were actually presented to the world before a single fact had been transmitted by Mr. Gliddon to confirm them.

Having, we trust, with a becoming pride, heretofore adverted to the elevated ground maintained by a member of the medical profession, a glory attained by a severity of literary toil, it was due to the reputation of both the gentlemen whose names are here freely introduced, to point out their exact position, since it may be of some consequence at a future period. While acknowledging ourselves indebted to both of them for enlarging the boundaries of useful knowledge, by unravelling the knotted and tangled thread of ancient history, and opening to us a fair page that explains the ancient condition of civilized man, ages upon ages before the birth of Moses, we shall not attempt to conceal the desire that they may long live to enjoy the advantages of a brilliant reputation, and to add new trophies to those already acquired.

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*Intermittent, Remittent and Congestive Fevers.*—It was by the request of a respectable class of students of medicine, that the author of an in-



structive pamphlet of forty-eight octavo pages, was induced to publish the results of his own personal observations on intermittent, remittent and congestive fevers. Thomas Barbour, M.D., one of the Faculty of Kemper College, St. Louis, Missouri, is the writer, and he introduces himself both cautiously and appropriately to those who may consult him. Having had ample opportunity at the South and West for becoming familiar with every known phase in these maladies, at times so extremely formidable and destructive to life, we place strong reliance on all that he says respecting them.

In the treatment of intermittents, the doctor relies upon large doses of quinine—"from ten to twenty grains, combined with ten to twenty of Dover's powder," when the paroxysms are regular. When called to a patient in the cold stage, he gives from forty to sixty drops of laudanum, and from one to two drachms of paregoric—the feet being placed in hot salt or a mustard bath. In remittents, Dr. Barbour shows his greatest strength; but if we copy too freely, it might interfere with the prospects of the publication, which came from the press at the expense of a spirited body of students. Although he places reliance on calomel as a purgative, he does not, like some of his western contemporaries, absolutely gorge the stomach with it. New England practitioners of modern times are convinced that there is a sad abuse of the Sampson of the materia medica, in the Mississippi valley, if all is true that is said of the mode of prescribing it.

Dr. Barbour's views of congestive fever are clear and satisfactory—and the treatment creditable to his judgment. He abominates, with a bold horror, two hundred grains of submuriate of mercury, and shows himself, in this respect, a discreet teacher of his profession.

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*University of Virginia—Medical Department.*—Through the polite attentions of Dr. Leitch, of Charlottesville, a catalogue of the officers and students of this University for 1844 and 5 has been received. It is a very complete document, presenting the minutest details in the course of study, and affording the kind of information that parents always desire, when fitting out a son for the university. The school of medicine, however, particularly interests us, not so much because it is unlike any other one on the Continent, but on account of its admirable system of instruction, of which we have before made mention, as being worthy both of commendation and imitation. On the determined system of hurrying everything in this country, even the processes of education, this institution is at variance with some others. There is a time there for every pursuit recognized in a course of liberal study. A medical student matriculates for a term of nine months—for which he pays \$223. This provides him with board, room, furniture, washing, attendance, fuel, lights and library—all the professorial tickets, and subjects for dissection. It is a very moderate charge. There are other prominent advantages arising from a matriculation at the University of Virginia. With its excellent regulations a student cannot be idle there, nor can any excuse from a pupil be received for non-compliance with the daily recitations, attendance on lectures, &c., but indisposition. In short, from the organization of the medical department, it has stood high—and so long as the same care is bestowed on the professional accomplishments of those who may be

graduated, as has thus far been shown, the State will have much to be proud of and to increase her reputation abroad.

**Galvanic Rings.**—So generally are these contrivances for operating upon the credulity of mankind, worn by people who are always trying the last new remedy, that an excellent profit is made by the venders. A simple copper wire, coated on the outside by an envelope or hoop of zinc, sells for fifty cents. An enormous profit is therefore realized on them. Although manufactured here in sufficient abundance to meet any demand, it is asserted that none but those of English manufacture are the real Simon Pures! It would be a hopeless undertaking to convince those whose meat and drink it is to purchase all the latest reputed remedies, that they were duped. Each one considers himself a shrewd observer, and capable of deciding, at least, upon the merits and demerits of all medicinal compositions. Some people are always willing to give credence to mysterious modes of treatment, and it is well known that society abounds with excellent persons, distinguished for their humanity, charity and philanthropic yearnings, who would sign certificates till the crack of doom, to satisfy the bequacked part of the community that astonishing and even miraculous cures have been performed by some favorite remedy.

**Compound and Complicated Fractures.**—Messrs. Crocker & Brewster have just published an essay on the *Treatment of Compound and Complicated Fractures*, by William J. Walker, M.D., being the annual address before the Massachusetts Medical Society in May last. The pages of the Journal were so nearly made up when a copy of the essay was received, that a further notice must be deferred to another week.

**Quinine in Miasmatic Regions.** TO THE EDITOR.—Sir,—I live in a miasmatic district, where we have a great amount of intermittent and remittent fever during the spring and fall, which is treated by me with quinine in eight-grain doses, commencing twelve hours before I expect the chill, and give one every two hours until the patient has taken three doses, twenty-four grains, during the intermission. In giving quinine, if it is given within six hours of the chill, it does no good, for the stomach being inactive it does not digest sufficiently to pass into the circulation.

Monticello, Lewis Co., Mo. Z. T. KNIGHT, M.D.

**Fear, its influence on public Health.**—Dr. Zimmerman has given a very interesting account of the influence exerted on the public health by the great fire at Hamburg in 1842. He notices particularly the fact that many bedridden invalids rose and displayed supernatural force and energy, some of whom remained permanently cured. Diarrhœa, mania and apoplexy were the principal diseases observed. There were 43 deaths, and 120 wounded. The monthly mortality was, however, below the average.

**Medical Miscellany.**—Dr. W. L. Wharton is Surgeon, and Dr. George Buist Assistant Surgeon, of the 2d Regiment of U. S. Dragoons—on their

march to Texas.—One case of yellow fever is reported to have occurred at New Orleans.—Four horses recently got into a log hut, and the door closing they remained nine days, without a particle of food, before they were discovered; but are now doing well.—A boy at Limington, Me., nine years of age, weighs 155 lbs. For two years he has been enlarging at a tremendous rate, according to the newspapers.—A Mrs. Greenlaw, of Bangor, through her clairvoyancy, seems to be making revelations so surprising, in regard to the thievish propensities of a man of unquestioned respectability, that the inhabitants of East Corinth have held a public meeting and resolved various things—none of them being in favor of mesmerism.—Dr. Paige, of Washington, D. C., who is connected with the patent office, has recently made a brilliant discovery in the application of electro-magnetism to the propelling of machinery.—In the intestines of an aged colored female idiot, who recently died at Baltimore, a pound of nails, pins and coal were found.—A man 79 years of age, in New Hampshire, is now cutting a third set of teeth.—At Geneva, in the professions, out of 1000, 114 fall by consumption, annually.—A white sulphur spring has been discovered on the margin of the lake, only a few miles from Saratoga Springs.—Dr. Jarvis, of Dorchester, and Dr. Kneeland, of Paris, France, have taken the Boylston prizes this season. The particulars will soon be known.

To CORRESPONDENTS.—A paper from Dr. A. McCall, of Nashville, Tenn., has been received.

MARRIED.—On the 27th of May, Leonard Spanlding, M.D., of Millbury, to Miss Hannah R. Colburn, of Lincoln.—At Randolph, Vt., Dr. J. Y. Dewey, of Montpelier, to Mrs. Tarbox.

DIED.—At Greensborough, Ala., Robert D. Webb, M.D., by being thrown from his horse.

Number of deaths in Boston, for the week ending Aug. 2, 44.—Males, 21; Females, 23. Billibers, 5. Of consumption, 5—convulsions, 2—accidental, 3—typhus fever, 2—smallpox, 1—jaundice, 2—dropsy, 2—diarrhea, 1—dropsy on the brain, 1—scarlet fever, 2—lung fever, 1—child-bed, 1—disease of the heart, 1—intemperance, 1—syphilis, 1—hooping cough, 2—guinea, 1—cramp in the stomach, 1—erysipelas, 1—measles, 1—cholera morbus, 1—cholera infantum, 2—inflammation of the bowels, 1—disease of the bowels, 4—droup, 1—teething, 1.  
Under 5 years, 22—between 5 and 20 years, 7—between 20 and 60 years, 17—over 60 years, 6.

REGISTER OF THE WEATHER,

Kept at the State Lunatic Hospital, Worcester, Mass. Lat. 42° 15' 40". Elevation 463 ft.

July.	Therm.	Barometer.	Wind.	July.	Therm.	Barometer.	Wind.
1	from 49 to 61	from 29.39 to 29.46	S E	17	from 70 to 86	from 29.13 to 29.21	S
2	54 63	29.34 29.40	S E	18	70 83	29.22 29.36	N W
3	64 70	29.19 29.25	S W	19	59 78	29.51 29.58	N W
4	58 75	29.19 29.29	S W	20	63 80	29.39 29.53	S W
5	57 73	29.33 29.41	S W	21	68 88	29.39 29.27	S W
6	60 81	29.43 29.46	W	22	71 83	29.19 29.11	N W
7	67 86	29.37 29.43	W	23	63 74	29.10 29.14	N W
8	69 85	29.36 29.32	W	24	85 73	29.17 29.08	N E
9	63 76	29.56 29.44	N W	25	59 68	29.52 29.54	S W
10	54 79	29.56 29.54	S W	26	53 63	29.59 29.54	S W
11	68 69	29.50 29.50	S W	27	64 73	29.05 29.15	N E
12	73 83	29.55 29.57	W	28	54 67	29.08 29.09	N E
13	73 83	29.14 29.30	N E	29	55 75	29.09 29.13	N W
14	64 69	29.19 29.17	N W	30	66 80	29.07 29.07	S W
15	73 81	29.18 29.20	W	31	66 76	29.07 29.20	S W
16	73 92	29.27 29.37	S W				

The month of July has been pleasant, favorable to the husbandman and the ingathering of the crops. There has been quite a number of warm days—the 15th inst. the warmest for many years. Range of Thermometer, from 53 to 94—Barometer, from 29.09 to 29.55. Rain, 2.91 inches.—19th, Thermometer 52° at 9 P. M. 14th, Ther. 52° at 1 1-2 P. M. 15th, Dwarf Horse Chosen is blossomed. 16th, Ther. at 94° at 1 1-2 P. M.

**Needles in the Pericardium of the Heart.**—Dr. Skinsky, a Russian physician, relates a case of punctum of the pericardium in the person of a woman, 35, and proving fatal by rupture into the pulmonary artery. An excruciating, a sewing-needle one inch long, was found so firmly imbedded in the substance of the right ventricle, and so surrounded, that it broke in several places on attempting to extract it. Dr. Skinsky, however, the needle having been withdrawn, stuck in the substance of the heart, near the apex, and gave rise to the aneurism, whence, by the rupture of the heart, it was thrust into the aorta. In the following case, reported by Dr. Leaning, the punctum of the needle appears to have been caused by the symptoms: a young woman, when sleeping, was a needle thrust into the right breast; a month subsequently she was seized with pain of the pleuritic, after sleeping in position, and was found to have a needle thrust into the right breast, with punctum of the right lung, and a small cavity containing pus. The punctum of the needle was found after death, and the needle was found in the body, through the right ventricle into the inferior vena cava, in the *British and For. Med. Review*.

**Accident to Professor Paine.**—We are happy to learn that Professor Paine, who recently received a severe injury to the head, is rapidly recovering, and will soon be able to resume his usual avocations. As many different versions have been published in relation to the manner in which the accident occurred, as well as the nature of the injury sustained, the following statement, derived from Dr. P. himself, will put the matter in its proper light. At the time of the accident, was laden with thirteen passengers, and was drawn by high-motiled and unmanageable horses. Dr. P. perceiving the danger, repeatedly requested the driver to stop, as he was at the top of a high hill, at the bottom of which was a bridge over a stream of some fifteen feet above the rocky bed, and the horses, however, gave way, which, by the effect of the driver's unmanageable horses, brought the load suddenly round, and the vehicle fell precipitately into the mud and water below. Dr. P. was thrown from his seat, and, in a state of insensibility, lay for some time. On examination, it was found that his collar-bone and two or three ribs of the left side were fractured; these, together with some bruising, and a severe concussion of the vital organs, rendered his situation very precarious for a day or two; but, from letters just received, we are glad to learn that he is rapidly convalescing. We trust that medical science may enjoy the benefit of his talents, learning, and research, for many years to come.—*New York Journal of Medicine*.

**Paralysis.**—We have used the strychnine 1-12 gr. three times a day, and gradually increased the dose to 1-8 gr. in two days, which we thought is a condition to be treated by it; that is, in which there was no evidence of inflammation. Slight twitches in the paralytic limbs were produced, showing the action of the remedy, but no permanent benefit has resulted. The condition is still the same, and from the probability of the various changes have taken place in the structure beyond the power of control.—*St. Louis Medical Journal*.